

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (original) A carbon nanotube-dispersed polyimide saturable absorber excellent in an optical quality, obtainable by mixing a carbon nanotube dispersion liquid comprising a carbon nanotube, an amide-based polar organic solvent, and a nonionic surfactant and/or a polyvinylpyrrolidone (PVP) with a mixture solution of a solvent soluble polyimide and an organic solvent.

2. (original) The saturable absorber according to claim 1, wherein the carbon nanotube is a single-walled carbon nanotube.

3. (currently amended) The saturable absorber according to claim 1, characterized in that where the amide-based polar organic solvent comprises N-methylpyrrolidone (NMP) and/or dimethylacetamide.

4. (currently amended) The saturable absorber according to claim 1, characterized in that where the nonionic surfactant is a polyoxyethylene surfactant.

5. (currently amended) The saturable absorber according to claim 1, characterized in that where the content of the nonionic surfactant is 0.005 to 5% by weight in the carbon nanotube dispersion liquid.

6. (currently amended) The saturable absorber according to claim 1, characterized in that where the content of the polyvinylpyrrolidone (PVP) is 0.1 to 10% by weight in the carbon nanotube dispersion liquid.

7. (currently amended) A method for producing a carbon nanotube-dispersed polyimide saturable absorber, characterized by comprising the steps of:

~~dispersing a single-walled carbon nanotube in a mixture solution of an amide-based polar organic solvent and a nonionic surfactant under intensive stirring, mixing the resultant dispersion liquid with a polyimide mixed organic solvent, and removing the solvent~~

mixing a carbon nanotube dispersion liquid comprising a carbon nanotube, an amide-based polar organic solvent, and a

nonionic surfactant and/or a polyvinylpyrrolidone (PVP) with a mixture solution of a solvent soluble polyimide and an organic solvent; and

removing the solvent.

8. (currently amended) A method for producing a saturable absorber, characterized by comprising the steps of:  
dispersing a single-walled carbon nanotube in a mixture solution of an amide-based polar organic solvent and a nonionic surfactant under intensive stirring; [,]

mixing the resultant dispersion liquid with a polyimide mixed organic solvent; [,] and  
removing the solvent.

9. (currently amended) The method for producing a saturable absorber according to claim 7, characterized in that where the obtained single-walled carbon nanotube dispersion liquid is treated with a filter having a retaining particle size of 0.1 to 3.0  $\mu\text{m}$  to obtain a dispersion liquid comprising fine particles of the single-walled carbon nanotube.

10. (new) A method for producing a saturable absorber,  
comprising the steps of:

dispersing a single-walled carbon nanotube in a mixture  
solution of an amide-based polar organic solvent and a nonionic  
surfactant under intensive stirring;

mixing a polyvinylpyrrolidone (PVP) therewith;

mixing the resultant dispersion liquid with a polyimide  
mixed organic solvent, and

removing the solvent.